

Mortar Fire Control System



Communications

Digital & Voice
SINGARS
SIP, EPLRS



Navigation & Pointing Device

Tube Mounted (INS)
Inertial
Navigation
System



120mm Track Mortar

PLGR

Location/
Navigation Aid



Driver's Display

Provides direction of
fire for orienting gun



Gunner's Display

Replaces Optical Sight
Digitally Linked to Pointing
Device & CI
Improved Gun Laying Procedure



Commander's Interface (CI)

Automatic Ballistic Computations
Digital Interface with Tactical Internet for
Situational Awareness & AFATDS



MISSION

Provide organic indirect fire support capability to the maneuver unit commander.

DESCRIPTION AND SPECIFICATIONS

The 120 mm mortar system is a conventional smoothbore, muzzle-loaded mortar system that provides increased range, lethality, and safety compared to the World War II-vintage 4.2-inch heavy mortar system it replaced in mechanized infantry, motorized, armored, and cavalry units. It is employed in both towed and carrier versions and fires a family of enhanced ammunition produced in the United States. The Mortar Fire Control System (MFCS) will provide mortar users with Paladin-like fire control capability that greatly improves mortar lethality, responsiveness and crew survivability. The M303 sub-caliber tube insert allows mortar crews to perform live-fire training with stockpiled 81mm ammunition.

Range: 7,240 m

Rate of fire: 16 rnds/min, first minute; 4 rnds/min sustained

Weight: 319 lb

Crew: 4 carrier mounted (M1064); 5 ground mounted (M120)

Ammunition: High explosive, smoke, illumination (visible light and infrared), full-range practice

FOREIGN COUNTERPART

Denmark, Finland, France, Germany, Great Britain, Israel, Russia.

FOREIGN MILITARY SALES

None

PROGRAM STATUS

FY99 Fielding of the M121 mortar in the M1064 mounted carrier was completed. A brigade of the 10th Mountain Division was equipped with M120-towed 120 mm mortars to demonstrate the "arms room concept."

- M734A1 multi-option fuze materiel released.
- M931 full-range practice round materiel released.
- The Precision Guided Mortar Munition (PGMM) is currently in the Advanced Technology Demonstration (ATD) phase.

PROJECTED ACTIVITIES**M30 Improved Mortar Ballistic Computer (IMBC)**

FY00 Initial fielding scheduled; the IMBC will replace the M23 MBC.

XM983 Infrared (IR) and the XM930 Visible Light Illuminating cartridges

FY01 Fielding scheduled.

Mortar Fire Control System (MFCS)

2QFY01 Type classification scheduled.

3QFY02 First unit equipped scheduled.

M934A1 HE round

FY03 Production of this new insensitive munition cartridge is scheduled. A material change to develop and qualify an insensitive explosive for the M934A1 HE round has been approved.

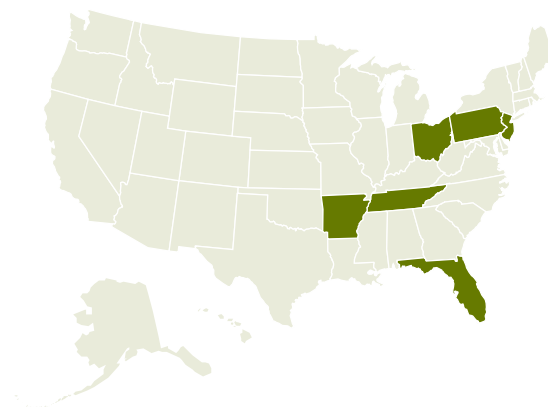
Precision Guided Mortar Munition (PGMM)

FY02 Scheduled for program definition and risk reduction.

FY06 Type classification

PRIME CONTRACTORS

Pocal Industries (Scranton, PA); SNC (Le Gardeur, Quebec); KDI (Cincinnati, OH); Valentec Systems (Mt. Arlington, NJ); AlliedSignal (Teterboro, NJ); American Ordnance (Milan, TN); Chamberlain Manufacturing Corporation (Scranton, PA); Pine Bluff Arsenal (Pine Bluff, AR); Lockheed Martin (Orlando, FL)



* See appendix for list of subcontractors



Project the Force



Protect the Force



Gain Information
Dominance



Shape the Battlespace



Conduct Decisive
Operations



Sustain the Force